

REMARKS

This application has been reviewed in light of the Final Office Action mailed on August 22, 2007. Claims 1-22 are pending in the application with Claims 1, 18 and 21 being in independent form. By the present amendment, Claim 18 has been amended.

In the Final Office Action, Claims 1-22 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over amended Claims 1-3, 5-19 and 21 of copending U.S. Application Serial No. 10/399,664. It is respectfully requested that the Examiner review this rejection and consider the withdrawal thereof in light of the claim amendments made to the independent claim of 10/399,664 during prosecution thereof.

It is respectfully submitted that the claim amendments made to independent Claim 1 of 10/399,664 make the claims of the 10/399,664 application and the present application patentably distinct from each other. In particular, Claim 1 of the 10/399,664 application recites cam follower means comprising "two protrusions extending from substantially diametrically opposed points of the operating means and so disposed that action of a lobe at a distal end of the actuating means on one of said protrusions acts to pivot the second jaw member into operative relationship with the first jaw member, and action of a lobe on a second of said protrusions acts to pivot the jaw means away from said operative relationship." Such patentably distinct structure is not recited by the present independent Claims 1 and 18. Accordingly, the claims of the two patent applications are patentably distinct from each other and withdrawal of the provisional obviousness-type double patenting is respectfully requested.

Claims 1-22 were rejected under 35 U.S.C. Section 102(b) as being anticipated by U.S. Patent No. 5,873,873 issued to Smith et al. The rejection is respectfully traversed.

Smith et al. is directed to an ultrasonic surgical clamp coagulator apparatus that is configured to effect cutting, coagulation, and clamping of tissue by cooperation of a clamping mechanism of the apparatus with an associated ultrasonic end-effector at a distal end. The Smith et al. apparatus propagates longitudinal waves of ultrasonic energy to vibrate an acoustic assembly of the apparatus at a selected frequency. The end-effector at the distal end of the waveguide is placed in contact with tissue of the patient to transfer the ultrasonic energy to the tissue. A surgical tool is utilized to press the tissue against the end-effector to cause cutting and coagulating of the tissue. There is no teaching or suggestion that the apparatus disclosed by Smith et al. propagates or transmits torsional ultrasonic vibrations as set forth by the recitations of Applicants' independent Claims 1, 18 and 22.

In the Final Office, the Examiner misapprehended the teachings of Smith et al. by stating that Smith et al. teaches that "a torque can be applied by a suitable torque wrench or the like to permit the waveguide, which is connected to the ultrasonic drive unit 50 and the elongated portion 150, to be rotatable and [therefore] *capable of transmitting torsional ultrasonic vibrations* (col. 13, line 64-col. 14, lines [sic] 12)." (Emphasis added)

This cited section of Smith et al. describes joining the elongated portion 150 of the ultrasonic clamp coagulator apparatus 120 to the ultrasonic drive unit 50 in ultrasonic-transmitting relationship. This section does not describe or suggest the propagation or transmission of torsional ultrasonic vibrations by the ultrasonic clamp coagulator apparatus 120. It is respectfully submitted that Applicants are familiar with the apparatus described by

Smith et al. and can provide an affidavit to attest the fact that apparatus described by Smith et al. can only transmit longitudinal waves of ultrasonic energy as stated by Smith et al. at column 4, lines 50-60 (“The mechanical motion results in longitudinal waves of ultrasonic energy that propagate through the acoustic assembly in an acoustic standing wave to vibrate the acoustic assembly at a selected frequency and excursion.” (Emphasis added)). There is no disclosure or suggestion in Smith et al. of the described apparatus being able to transmit torsional ultrasonic vibrations, such waves are different from longitudinal ultrasonic vibrations as described and illustrated at Applicants’ company’s website,

http://www.sra-developments.co.uk/lotus_ultrasound.htm.

In particular, Applicants’ independent Claim 1 recites “A surgical tool capable of transmitting torsional ultrasonic vibrations, said surgical tool comprising longitudinally extending guide means defining a longitudinal axis of said tool, a first jaw member at a distal end thereof, a longitudinally extending carrier means rotatable about said guide means, a second jaw member mounted pivotably to a distal end of said carrier means, and outer shroud means including operating means for said second jaw member whereby rotation of said carrier means acts on the operating means to cause pivoting of said second jaw member into and out of operative relationship with said first jaw member.” (Emphasis added)

Applicants’ independent Claim 18 recites “A surgical tool capable of transmitting torsional ultrasonic vibrations, said surgical tool comprising a longitudinally extending first guide member having a first jaw member at a distal end thereof, a second jaw member movable into and out of operative relationship with the first jaw member and carrier

means and operating means for the second jaw member so adapted that the second jaw member follows a three dimensional path when so moved.” (Emphasis added)

Applicants’ independent Claim 21 recites “A method for severing and coagulating tissue using torsional ultrasonic vibrations comprising: providing a waveguide having a first jaw member at a distal end thereof and capable of transmitting torsional ultrasonic vibrations to the distal end thereof; providing a second jaw member movable into and out of operative relationship with the first jaw member; clamping tissue between first and second jaw members of an ultrasonic tool capable of transmitting torsional ultrasonic vibrations to the distal end thereof; causing torsional ultrasonic vibrations to be transmitted to the first jaw member; and applying pressure to press the tissue between the first and second jaw members for ultrasonically severing and coagulating the tissue.” (Emphasis added)

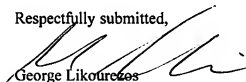
Accordingly, since there is no teaching or suggestion that the apparatus disclosed by Smith et al. propagates or transmits torsional ultrasonic vibrations as set forth by the recitations of Applicants’ independent Claims 1, 18 and 21, Applicants’ independent Claims 1, 18 and 21 are patentable over Smith et al. Hence, withdrawal of the rejection under 35 U.S.C. Section 102(b) with respect to independent Claims 1, 18 and 21 is respectfully requested.

Dependent Claims 2-17, 19, 20 and 22 depend from either independent Claims 1, 18 and 21, and therefore contain the limitations of independent Claims 1, 18 and 21. Therefore, for at least the same reasons given for independent Claims 1, 18 and 21, withdrawal of the rejection under 35 U.S.C. Section 102(b) with respect to dependent Claims 2-17, 19, 20 and 22 is respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application and not previously withdrawn, namely, Claims 1-22, are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicants' undersigned attorney at (631) 501-5706.

Respectfully submitted,



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